ALTERNATIVES FOR THE ANNUAL MILITARY PAY RAISE

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PREFACE

The annual military pay raise has a key influence on manning the active-duty military services. In recent years, the rate of increase has been held below that of wages and salaries in the private sector. The military services' ability to retain and recruit enlisted personnel has so far remained strong, though continuing limits on pay would eventually create difficulties.

In its proposed budget for fiscal year 1986, the Administration recommended a military pay increase that would have more than kept pace with expected increases in private sector wages; lower increases were, however, debated. The Subcommittee on Military Personnel of the House Armed Services Committee asked the Congressional Budget Office (CBO) to look at alternatives to the Administration's budget proposal, including a freeze on military pay. This report compares the alternatives in terms of their effects on enlisted retention and recruitment over the next five years. In keeping with CBO's mandate to provide objective analysis, the report makes no recommendations.

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SUMMARY

Under current law, active-duty military personnel are to receive an annual raise in October. Each percentage point increase in their pay adds more than $600 million to budget authority. With the prospect of large, persistent deficits throughout the decade, the annual pay raise stands out as a target for saving.

The Administration has proposed raising pay 3 percent in July 1985 instead of October 1985, with no further raises until October 1986. The House Armed Services Committee has proposed a 3 percent raise, though not until January 1986. This analysis documents the effects of the 3 percent raise versus both a pay "freeze"--that is, no raise at all until October 1986--and selective pay increases. The pay freeze was discussed early in this year's defense budget debate.

CBO's analysis finds, that a one-year freeze in pay would hurt recruiting and retention, especially in the Army and the Navy. With a freeze but no other real changes in compensation, the services would not retain or recruit as many personnel as they would if pay rose 3 percent. However, the services' career forces and recruit quality should stay well above the low levels of 1980 when manning problems were of great concern, especially if the Army continues to relax restrictive personnel policies. And erosion in the career force would be negligible if increased reenlistment bonuses accompanied the freeze.

SAVINGS FROM ALTERNATIVE APPROACHES

Under the Administration's proposal for a 3 percent raise in July, military pay would more than keep pace with the 3.1 percent increase in private civilian wages that CBO expects to occur during 1985. Less generous increases could save substantial sums. Deferring the 3 percent raise until January 1986 would save $450 million in defense budget authority and outlays in 1986. Eliminating the raise altogether, thereby freezing military pay for a year, would save $1.8 billion in 1986 and $9.9 billion over the next five years.

ABILITY TO RETAIN EXPERIENCED PERSONNEL

Savings in pay would come at some loss in manpower. In varying degree, alternative pay raises would affect the military services' ability to retain career enlisted personnel (defined as those with five or more years of active-duty service).

Assuming a 3 Percent Pay Raise

Raising pay, either in July or January, by 3 percent would support further growth in the career forces. Between 1985 and 1990, the services would altogether add more than 29,000 people. (Choosing July or January would make only a modest difference.) In the Air Force and Marine Corps, numbers of career enlisted personnel could reach the highest levels since the All Volunteer Force (AVF) began. Navy career personnel would increase by several thousand; Army numbers would stay fairly level.

How would the projected career forces compare with the levels of earlier years? Unfortunately, no clear metric for judging such a comparison stands out, since the services do not set formal goals; their personnel programs may reflect feasibility as much as optimality. CBO has chosen 1980 as a benchmark. That year was one of severe manning problems, and hence it may be regarded as a lower bound for purposes of comparison.

By the measure of 1980, the career forces would remain at satisfactory levels under the Administration's proposal. Not only would numbers of career enlisted personnel exceed 1980 levels; their proportion to all personnel would also be higher, despite the substantial growth taking place in the total enlisted force's size. The proportion of career personnel would actually increase over present levels in the Air Force and Marine Corps. It would stay steady in the Army. In the Navy the proportion would decline, reflecting a large planned growth in the total size of its enlisted force, but in numbers career personnel would still be well above the levels of 1980.

Assuming a Pay Freeze

Freezing pay for one year would not stem growth through 1990 in numbers of career personnel in the Air Force or Marine Corps. Past momentum would propel them upward. The other two services would not fare as well, however. Between 1985 and 1990, the Navy's career force could lose 3,500 people and the Army's, 14,200; but their career forces would still remain above 1980 levels, in both numbers and in proportion to the total forces (see Summary Table).

Changes in reenlistment policy could brighten the Army's prospects considerably, adding several thousand soldiers to the career force. Through-

out 1983 and 1984, the Army inhibited reenlistments by soldiers who were slow in winning promotion, a disproportionate number of whom scored below average on the Armed Forces Qualification Test (AFQT) as recruits. In 1985, the Army began relaxing this policy. If carried further, this relaxation might actually add 4,400 soldiers to the Army's career force over the next five years. The reason is that additional reenlistments among lower scoring soldiers would more than offset losses of higher scoring ones.

Freezing pay could thus yield large budgetary savings without necessarily diminishing the size of the career force. The effects this might have on the quality of the career force are uncertain, since the evidence linking AFQT scores to later performance is not definitive.

SUMMARY TABLE. ENLISTED CAREER PERSONNEL
(By fiscal year)

	Actual	Projected Under Administration Plan		Projected Under Freeze	
	1980	1986	1990	1986	1990
Numbers (thousands)					
Army	267.4	297.0	299.0	294.6	286.5
Navy a/	183.1	238.2	244.1	235.7	234.7
Marine Corps	47.6	65.7	72.2	64.9	68.7
Air Force	237.5	291.7	307.0	289.8	300.2
Proportions (percentages) b/					
Army	39.7	44.5	44.8	44.2	43.0
Navy	40.9	46.7	45.6	46.2	43.8
Marine Corps	27.9	36.7	39.3	36.2	37.4
Air Force	52.1	58.6	59.3	58.3	58.0

a. These figures exclude full-time reservists (TARS) who were counted in active-duty end strengths before 1983.

b. Career personnel as a proportion of all enlisted personnel, assuming the end strength increases programmed into the Administration's 1986 budget.

Raising Pay Selectively

One way to hold down costs while minimizing effects on retention would be through a selective pay increase in place of the Administration's across-the-board approach. If the annual pay raise was eliminated in 1986, DoD could, for example, design a package of reenlistment bonuses having about the same effect on career reenlistments as a 3 percent raise in July. Savings would still be considerable--at least $7.1 billion through 1990 compared to $9.9 billion under the one-year pay freeze. In this example, pay raises would go only to enlisted personnel with 10 or fewer years of service who were eligible for reenlistment. Pay increases would not be spread over groups in little need of improved retention: most officers, and the more junior and senior enlisted personnel. Of course, the effects of such selective pay increases would not be identical to those of an across-the-board raise.

ABILITY TO RECRUIT

This year's decision on the pay raise has less importance for recruitment than for retention. Whether pay increases 3 percent or not at all, the services' ability to recruit should remain about the same. A one-year freeze would have only modest effect on youths' willingness to enlist. By lowering retention, however, a freeze would force up annual requirements for recruits.

At issue is the quality of those recruits, because the services can usually attract enough people to meet bare numerical needs. Chief measures of recruits' quality include the proportion holding high school diplomas and their scores on the military's entrance examination. As with retention, there is no clear metric for judging quality. The Congress has set limits on education and test scores: in the Army at least 65 percent of male recruits must have high school diplomas; and in each service, no more than 20 percent of recruits can have scored markedly below average. The Army itself has announced much higher goals, very high by historical standards, but they are still under review by the Department of Defense.

Regardless of the pay raise, the Air Force and Marine Corps should be able to continue recruiting high percentages of high school diploma graduates (HSDGs). The proportion scoring markedly below average on the entrance examination would also remain low.

For the Army and Navy, however, the outlook is difficult with or without a pay raise. An improving economy and shrinking youth population will tend to drive recruiting down no matter what happens to the military

pay raise. The Navy could return to quality levels typical of the 1970s, when its HSDG percentages stood in the low 70s, though its proportion of low-scoring recruits would be smaller than in the 1970s.

Army recruiting could also deteriorate, especially as measured against the success of the last three years when HSDG percentages averaged above 85 percent. A one-year pay freeze would cause the Army's HSDG percentage to drop into the low 70s, perhaps even lower by decade's end. While this would be better than the 1980 level of about 50 percent, it would not be nearly high enough to meet the Army's new goals for quality, which call for 90 percent of recruits to be high school graduates.

Approaches other than across-the-board pay raises could help to offset these problems. To improve recruiting, the Army, and possibly the Navy, could spend more on bonuses or advertising; such added spending would be modest relative to the costs of a pay raise. Or the Army could modify its personnel policies. For example, further relaxing reenlistment policies would cut losses of experienced personnel, thus easing the demand for new recruits. Raising the allowable percentage of recruits in Category IV (the lowest acceptable category on the military entrance examination) could also boost HSDG percentages. Category IV recruits do not appear to perform as well as recruits who score higher, but the percentages of recruits scoring in that category are now very low compared to 1980 or even to the 1970s; this may give the Army room for change.

EFFECTS OF OTHER PAY CHANGES

Freezing pay for one year probably would not cause a return to the major enlisted manpower problems of 1980, and many adverse effects could be offset by other personnel policy changes. This conclusion rests on the assumption--which some may find optimistic--that military pay would keep pace with increases in private civilian wages after 1986. Restricting growth in military pay beyond 1986 would increase the risk of reverting to the unsatisfactory conditions of 1980. The outlook could also worsen if the Congress reduced other pay programs, such as bonuses or military retirement. For example, a major retirement reform--as the House Armed Services Committee has proposed in principle--would have important effects that are beyond the scope of this analysis.

CHAPTER I. THE ANALYSIS AND ITS ASSUMPTIONS

The military services currently have no difficulty in manning their active-duty enlisted forces. Despite an improving economy and a shrinking pool of available manpower, they continue to be successful in retaining and recruiting enlisted personnel. When fiscal year 1985 ends, CBO expects the All-Volunteer Force (AVF) to have done as well as at any time except 1984.

To continue this success, the Department of Defense (DoD) has proposed raising military pay 3 percent across the board in July 1985. Under current law, military personnel are to get a raise in October. The Administration would accelerate the raise to reduce costs in the fiscal year 1986 budget. In arithmetic terms this would be akin to raising pay 3.75 percent in October--somewhat above the growth in civilian wages that CBO expects will occur during 1985.

The Congress could, however, decide to hold back on pay increases in an effort to reduce budget deficits, now projected to hover around $300 billion by 1990, if budget policies enacted in 1984 continue unchanged. Since almost 30 percent of proposed DoD outlays consist of current pay and benefits for military personnel, checking growth in military pay could yield large, near-term savings.

CBO analyzed three approaches to cutting back on military pay as alternatives to the Administration's plan:

- Deferring the 3 percent raise until January, as has happened in the last two years and has been proposed by the House Armed Services Committee;
- Freezing pay for one year, as was discussed earlier in this year's budget debate; and
- Substituting selective pay raises for the 1986 across-the-board raise.

All of these approaches assume that military pay increases in later years would keep pace with those in the private sector.

Savings

Compared with the Administration's budget, freezing pay would save $1.8 billion in 1986 and $9.9 billion in budget authority over the next five years. Deferring the pay raise would save far less, only about $450 million in 1986. Raising pay selectively by means of reenlistment bonuses could save at least $1.5 billion in 1985, or $7.1 billion through 1990. (CBO used an illustrative package of bonuses that would have roughly the same effects on reenlistments as the Administration's pay plan.)

Large budgetary savings in military pay could have negative effects on retention and recruitment, reversing the successes of recent years. At issue is whether such savings are worth the losses they would produce in experienced or high-quality personnel. If they were to send the services "down the slippery slope to the same place they were four years ago when recruitment and retention were in terrible condition," as the Assistant Secretary of Defense for Manpower, Installations, and Logistics warns, then the answer might be no. 1/ The following chapters present CBO's estimates of how alternative pay policies would affect retention and recruitment. Table 1 summarizes highlights for the four services together. The rest of this chapter reviews the assumptions behind CBO's analysis. 2/

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1. Army Times, March 11, 1985.

2. The projections were made using CBO's enlisted transition model, a basic Markov-chain model that uses matrices of transition probabilities to simulate the retention or separation decisions of military personnel. A transition probability is the likelihood that a member in year of service (YOS) i at the start of a fiscal year, with j months until expiration of term of service (ETS), is in YOS i+1 at the end. The transition probability for someone making a reenlistment decision during the projection year (less than 13 months to ETS) is equal to the reenlistment rate.

   The model extrapolates transition probabilities from the actual rates observed in fiscal year 1984, which the Defense Manpower Data Center provided. Non-reenlistment transition rates do not vary over time. Reenlistment rates, however, depend on future changes in both civilian unemployment and relative military pay.

   Elasticities express the percentage changes in reenlistment rates that may be expected from a 1 percent change in unemployment or pay.

ASSUMPTIONS BEHIND CBO'S RETENTION ANALYSIS

The annual pay raise will not be the only factor influencing retention. Among others, the course of private civilian wages will be especially important. During fiscal year 1985, CBO expects the average hourly earnings (AHE) of production or supervisory workers to increase 3.1 percent. (The AHE index seems an appropriate standard against which to judge military pay because it reflects the range of occupations most common to enlisted personnel.) A 3 percent raise in July would thus more than keep pace with private wages. CBO also assumes that future raises in military pay will just match increases in private-sector wages, although they will not make up for past limits on military pay increases.

Under the President's 1986 budget, three of the four military services are seeking large increases in end strengths. CBO assumes that the services realize these goals: the Navy expands from about 496,000 enlisted personnel in 1985 to 536,000 by 1990; the Air Force from 490,000 to 518,000; and the Marine Corps from 178,000 to 184,000; while Army end strengths hold steady at 667,000 enlisted personnel. CBO also assumes that the budget's overall goal for recruits with previous military service--about 22,000 in 1986--continues in future years.

They decline (become more inelastic) as years of service increase. With respect to unemployment, elasticities go from around 0.50 at the first reenlistment point to less than 0.10 after the eleventh year of service. Elasticities for relative pay behave similarly, going from around 2.5 in early YOS to less than 1.0 after YOS 11. These elasticities--which differ slightly among services--are estimated from logistic regression equations that relate past changes in unemployment and pay to each military service's historical reenlistment rates.

The effects of changes in pay are stated through the Annualized Cost of Leaving Model (ACOL). This model links the reenlistment decision to a comparison between the cost of leaving service now and the cost of leaving at some later date. Real increases in military pay boost the cost of leaving now, thus raising the reenlistment rates. (See John Warner, Military Compensation and Retention: An Analysis of Alternative Models and a Simulation of a New Retention Model, Center for Naval Analyses, August 1981.)

TABLE 1. SUMMARY OF ALTERNATIVES FOR THE ANNUAL PAY RAISE: THEIR COSTS AND EFFECTS ON MANNING THE ACTIVE-DUTY ENLISTED FORCE (By fiscal year)

	Administration Proposal a/	Deferred Raise b/	Freeze c/
Increase or Decrease in Career Personnel over 1985 Level			
1986	5,700	2,100	-1,900
1987	13,300	8,600	-2,300
1990	35,400	29,200	3,200
Proportion of Enlisted Personnel in Career Force d/			
1986	48.2	48.0	47.8
1987	48.2	47.9	47.3
1990	48.4	48.1	46.7
Percentage Male Recruits with High School Diplomas			
1986	89.0	89.0	87.0
1987	87.5	85.5	82.0
1990	80.0	79.0	76.0
Savings over Administration's Proposal			
1986	—	$450 million	$1.8 billion
1986-1990 (total)	—	**$450 million**	**$9.9 billion**

a. Three percent increase in July 1985.

b. Three percent increase in January 1986.

c. No raise until October 1986.

d. The proportion in 1980--a low point for the AVF--was 41.8 percent.

CBO's projections also assume that the effects of reenlistment policies in place during 1984 continue. To varying degrees, the services control the flow of reenlistees into the career force so as to promote other objectives. For instance, the Army has tightened its standards for reenlisting in order to improve what it perceives as the overall quality of the enlisted career force. Recent changes in this policy could counter projected losses of fully trained people.

Finally, CBO's projections assume that the Congress makes no other major changes in pay or benefits. This is especially crucial because of the possibility that the Congress may change the military retirement system this year. Since a specific plan has yet to emerge for Congressional consideration, CBO could not estimate the number of career personnel who might depart because of retirement modification. (If a plan "grandfathers" those now on active-duty, near-term losses might be small.) Clearly, however, any changes in the benefits of military service could alter the projections.

ASSUMPTIONS BEHIND CBO'S RECRUITING ANALYSIS

The military services classify potential recruits by education and test scores. High school diploma graduates (HSDGs) are distinguished from non-graduates and holders of General Equivalency Diplomas, because they are much more likely to complete training and their first few years of service. Test scores on the military's entrance examination (the Armed Forces Qualification Test, or AFQT) are grouped into several broad categories that relate to trainability: I, II, III, and IV. Persons scoring above average--who display the greatest trainability--fall in Categories I and II; persons scoring average, in III; and persons scoring below average, in IV. (Those scoring markedly below average fall in Category V, and under present policies are not accepted.) High school diploma graduates who score in Categories I, II, or the top half of III (IIIA) are considered "high-quality."

The supply of recruits without high school diplomas or in Category IV generally exceeds the services' needs. CBO assumes that the services can always recruit as many of these prospects as they want. To restrict the acceptable percentages in Category IV, CBO was guided by the services' present goals. In each of the next five years, the Army is assumed to limit Category IV recruits to 10 percent of all non-prior service accessions; the Navy to 12 percent; the Marine Corps to 14 percent; and the Air Force to just under 5 percent. Further, all Category IV recruits are assumed to hold high school diplomas.

In contrast, the supply of male HSDG recruits in Categories I-IIIA (and IIIB to some extent) is assumed to depend on economic conditions, population, and the services' own recruiting efforts. Changes in those factors will affect the supply of scarce recruits in coming years according to the elasticities shown in Table 2. (Elasticity refers to the percentage change in supply resulting from a 1 percent change in one of the above factors. Thus a 1 percent increase in civilian unemployment can be expected to increase the Army's supply of high-quality recruits by 0.75 percent.)

Economic conditions cannot be forecast several years in advance. Projections of recruit supply purport to show not what will happen, but what would happen if assumed trends in important variables materialize. The next few sections detail CBO's assumptions about these trends.

Economic Conditions

CBO assumes in its budget projections that the civilian unemployment rate will drop from 7.1 percent in 1985 to 6.3 percent in 1990. If this holds true, the supply of scarce recruits will also decline.

Wages for young workers are another determinant of supply. At the bottom of the recent recession, youths' wages rose much more slowly than did earnings overall. CBO assumes that after 1985, in a healthier economy, increases in youths' wages will keep pace with overall wage increases. This may be a conservative assumption. Some economists believe that smaller numbers of youths entering the labor market will cause their wages to increase faster than those of adults.

Population

The male youth population will not show much change in numbers over the next five years. Between 1985 and 1990, the pool of available recruits will decline about 7 percent. (Larger decreases will occur in the mid-1990s.) To calculate the pool, CBO weighted the number of men in each age group by that age's share of non-prior service accessions in 1983 (the most recent year for which CBO had data). Thus 18-year-old men make up one-third of the population pool in 1990; 25-year-old men, only 6 percent. Also, CBO adjusted the number in each age group for previous years' enlistments.

Recruiting Effort

Several factors under the services' control influence the supply of recruits--in particular, enlistment bonuses, recruiters, and advertising. CBO assumes these categories of spending continue at the same real levels as in 1985. (The services have proposed various increases for 1986, but the Congress has

TABLE 2. ASSUMED ELASTICITIES OF HIGH-QUALITY SUPPLY FOR KEY FORECASTING VARIABLES a/

	Relative Pay b/	Production Recruiters c/	Youth Population d/	Unemployment e/
Army	1.0	0.80	0.20	0.75
Navy	0.65	0.75	0.25	0.50
Marine Corps	0.75	0.75	0.25	0.60
Air Force f/	0.50	1.0	--	--

a. "High-quality" refers to male high school diploma graduates (HSDG) who score in Categories I-IIIA on the Armed Forces Qualification Test. Studies generally have found that the four variables shown here account for much of the past variation in the supply of high-quality recruits. Such studies, however, often do not agree on the elasticity for a given variable: for example, estimates of the effect of the pay factor range from around 0.50 to around 2.0. CBO tried to strike a balance among the different findings of recent studies. Though the choice is essentially arbitrary, using slightly different sets of elasticities would not greatly alter the projections.

b. The ratio of military to civilian earnings.

c. Total numbers of production recruiters, except for the Air Force. There, the variable is the number of Air Force recruiters relative to those of other services.

d. Weighted population pool of 17- to 25-year-old men.

e. Civilian unemployment rate. Over the last two years, month-by-month changes in the rate of youth unemployment have moved closely with changes in the aggregate.

f. Some evidence suggests that HSDG IIIAs in the Air Force are not supply-constrained. That is, observed enlistments of HSDG IIIAs fall along the Air Force's demand curve. CBO assumes that changing supply conditions affect only the proportion of Air Force recruits in the top two AFQT categories. In addition, that proportion will fall (rise) as the Air Force's total demand for recruits rises (falls).

yet to review them.) Educational benefits are the one exception. CBO estimates that the recently enacted "new GI Bill" will boost the Army's supply of high-quality recruits less than 3 percent. Higher educational benefits also make it more likely that eligible personnel will leave service to use their benefits rather than reenlist.

CHAPTER II. THE OUTLOOK FOR RETENTION

The most often used indicator of retention is the size of the enlisted career force, made up of personnel who have served on active duty for five or more years. Over the last four years, numbers of career personnel have increased dramatically: from 736,000 in 1980 to 877,000 in 1984. Much of this increase stemmed from the large pay raises the Congress gave to military personnel in the early 1980s. In fiscal year 1981, military pay rose 11.7 percent, and the Congress also added a major new benefit, the variable housing allowance. 1/ In 1982, military pay increased from 10 to 17 percent for enlisted personnel, with the larger raises going to the more senior people.

OVERVIEW OF FUTURE RETENTION

The success of recent years has laid the basis for continued growth in the career force. Under the Administration's pay raise proposal, CBO estimates that the four military services together would have 35,400 more career personnel in 1990 than in 1985. Even a one-year freeze in pay would still allow some growth; by 1990, the career force would include an additional 3,200 people. Projected numbers of career personnel appear in Table 3. Some of the budgetary savings from a one-year freeze could be realized without impeding growth in the career force by selectively increasing pay, discussed at the end of this chapter.

Numbers alone tell an incomplete story. Overall, the services are seeking 74,000 additional enlisted personnel through 1990, to support expansion of their force structure and the introduction of new weapons systems. Merely to keep pace with this growth, the military may need more career personnel. Their present numbers make up 48.4 percent of the active-duty enlisted force. Under the Administration's plan, that proportion by 1990 would still be 48.4 percent. It would decline under a pay freeze, with the proportion of career personnel dropping to 46.7 percent.

These declines, when judged against the last decade's trends in retention, do not seem striking. The career forces have grown rapidly since

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1. The average non-commissioned officer receives about $1,000 yearly in Variable Housing Allowance (VHA).

TABLE 3. PROJECTED NUMBERS OF ENLISTED CAREER PERSONNEL UNDER VARIOUS PAY RAISE ALTERNATIVES, FISCAL YEARS 1986 TO 1990 (In thousands)

Pay Raise	(Base) 1985	1986	1987	1988	1989	1990
Administration Proposal						
Army	300.7	297.0	298.8	299.2	298.9	299.0
Navy	238.6	238.2	237.8	235.1	240.3	244.1
Marine Corps	63.9	65.7	67.5	69.2	71.4	72.2
Air Force	283.7	291.7	296.1	297.9	301.7	307.0
DoD	886.9	892.6	900.2	901.4	912.0	922.3
Deferred Raise						
Army		295.5	296.9	297.1	296.8	297.0
Navy		237.2	236.5	233.3	237.9	242.1
Marine Corps		65.4	67.0	68.6	70.6	71.4
Air Force		290.9	295.1	296.6	300.1	305.6
DoD		889.0	895.5	895.6	905.4	916.1
Pay Freeze						
Army		294.6	293.0	290.4	287.7	286.5
Navy		235.7	233.1	228.3	231.3	234.7
Marine Corps		64.9	65.9	66.7	68.2	68.7
Air Force		289.8	292.6	292.8	295.2	300.2
DoD		885.0	884.6	878.2	882.4	890.1

1980, when the overall proportion of enlisted career personnel was only 42 percent. Even a pay freeze would leave the services with higher proportions of career personnel than at any time during the AVF's first eight years. Table 4 details CBO's projections.

The pay raise alternatives would not have identical effects on the career force, and the differences could be significant in choosing one approach over another. But other factors also play key roles in deciding the career forces' size and quality, particularly the services' own personnel policies. Indeed, the decision as to the 1986 pay raise could turn out to be less critical than these other factors.

TABLE 4. PROJECTED PROPORTIONS OF ENLISTED CAREER PERSONNEL UNDER VARIOUS PAY RAISE ALTERNATIVES, FISCAL YEARS 1986 TO 1990

	(Base) 1985	1986	1987	1988	1989	1990
Administration Proposal						
Army	45.1	44.5	44.8	44.9	44.8	44.8
Navy	48.1	46.7	46.0	45.1	45.2	45.6
Marine Corps	35.9	36.7	37.2	37.7	38.9	39.3
Air Force	58.0	58.6	58.7	58.2	58.7	59.3
DoD	48.4	48.2	48.2	47.9	48.2	48.4
Deferred Raise						
Army		44.3	44.5	44.5	44.5	44.5
Navy		46.5	45.8	44.8	44.8	45.2
Marine Corps		36.5	37.0	37.4	38.4	38.8
Air Force		58.5	58.5	58.0	58.4	59.0
DoD		48.0	47.9	47.6	47.8	48.1
Pay Freeze						
Army		44.2	43.9	43.5	43.1	43.0
Navy		46.2	45.1	43.8	43.5	43.8
Marine Corps		36.2	36.3	36.4	37.1	37.4
Air Force		58.3	58.0	57.3	57.4	58.0
DoD		47.8	47.3	46.7	46.5	46.7

DIFFERENCES AMONG THE SERVICES

The aggregate changes in DoD career force size discussed above mask important differences among the services. Generally, the Air Force and Marine Corps fare better than the Navy and Army. Freezing pay for one year would hardly dent projected growth in the number of career airmen and Marines, but it could cost the Navy about 4,000 experienced people over the next five years, leading to a modest decline in its career force. A freeze could cost the Army even more dearly, with possible losses of some 14,000 career personnel in the absence of offsetting changes in reenlistment policies.

Retention in the Air Force and Marine Corps

In the Air Force and Marine Corps, CBO projects continued increases in career force size. Figures 1 and 2 chart the outlook for these services under various pay approaches, in comparison to their experience during the AVF. Even under a freeze, the Air Force could add 16,500 career personnel over the next five years, and the Marine Corps 5,000. Together, by 1990, these two services could have 84,000 more career personnel than in 1980.

Each of these services could keep its proportion of career personnel at historically high levels, despite planned increases in their end strengths. Under a freeze, 58 percent of Air Force enlisted personnel and over 37 percent of Marine Corps personnel would have five or more years of service in 1990. (By comparison, between 1974 and 1984, the Air Force averaged 53 percent of enlisted members in the career force; the Marine Corps, 29 percent.) At some point, these two services might decide to restrict the flow of reenlistees. The Air Force has already begun to screen reenlistments more closely, thus causing some drop in second-term reenlistments.

Retention in the Navy

Risks from freezing pay loom larger in the Navy. A raise in pay, whether in July or January, would add several thousand to the Navy's career force over the next five years. (By 1990, the difference between the Administration's plan and deferring the raise until January would amount to only 2,000.) Freezing pay, however, would take away about 4,000 career personnel, leaving the number below today's level in 1990. Still, the Navy would have 52,000 more career personnel by 1990 than it had in 1980. The relative strength of the Navy's career force is apparent in Figure 3, which charts CBO's projections against historical numbers.

Because Navy end strength is assumed to grow by 40,000 from 1985 to 1990, its proportion of career personnel falls under any of the alternatives. Freezing pay would bring the career force proportion down to about 44 percent in 1990, roughly the same level as in 1982, much above earlier years. Of course, these proportions would climb if the Congress reduced the Administration's end-strength requests, as the Senate Armed Services Committee has recommended for 1986.

Retention in the Army

The Army's career force would hold steady at about 299,000 if pay was increased 3 percent in July. Deferring the raise to January would, by 1990, shrink that figure by only about 2,000. But freezing pay in 1986 could lead to 14,200 fewer career personnel, continuing a downward trend that shows

FIGURE 1. EFFECTS OF PAY RAISE OPTIONS

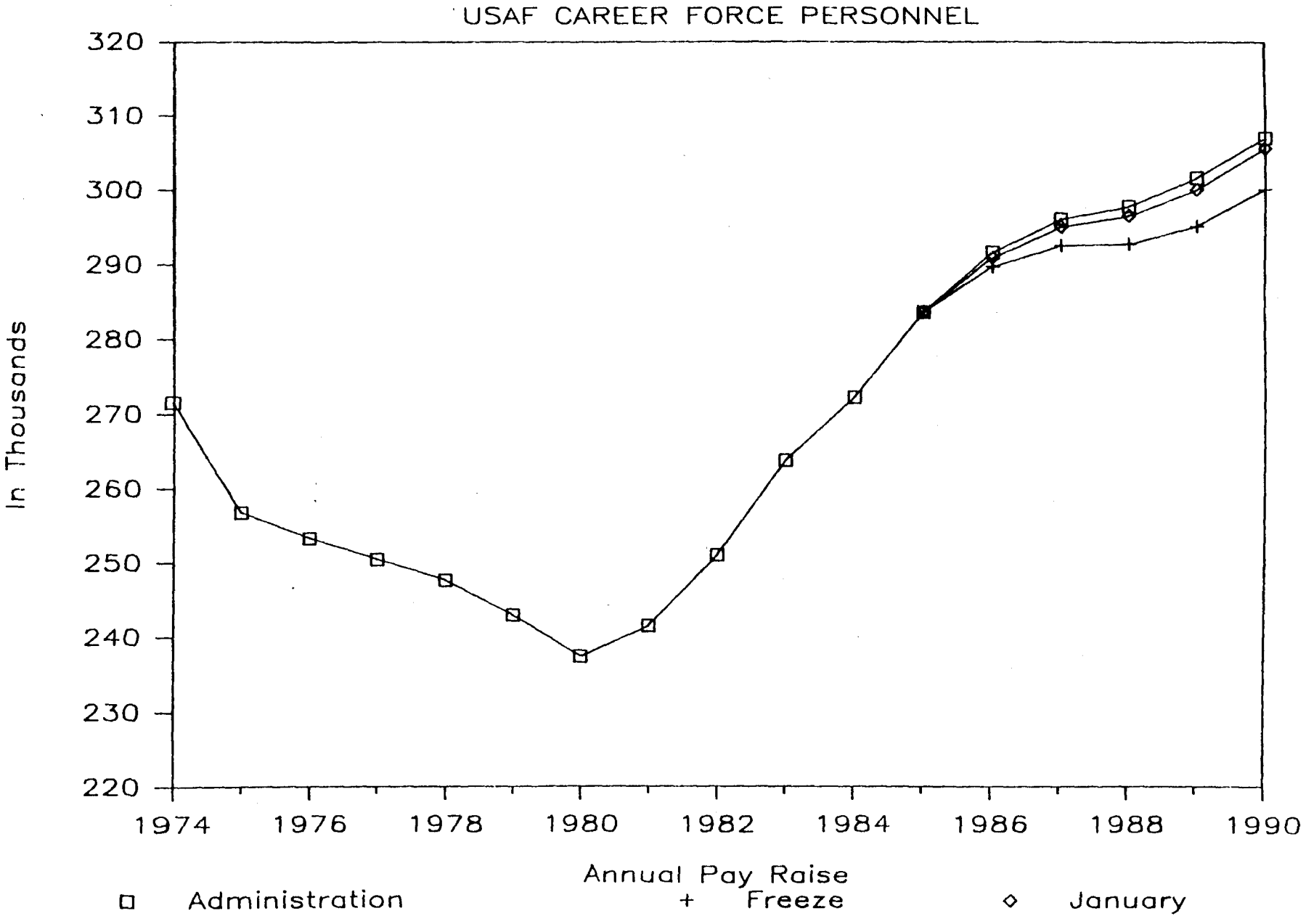


FIGURE 2. EFFECTS OF PAY RAISE OPTIONS

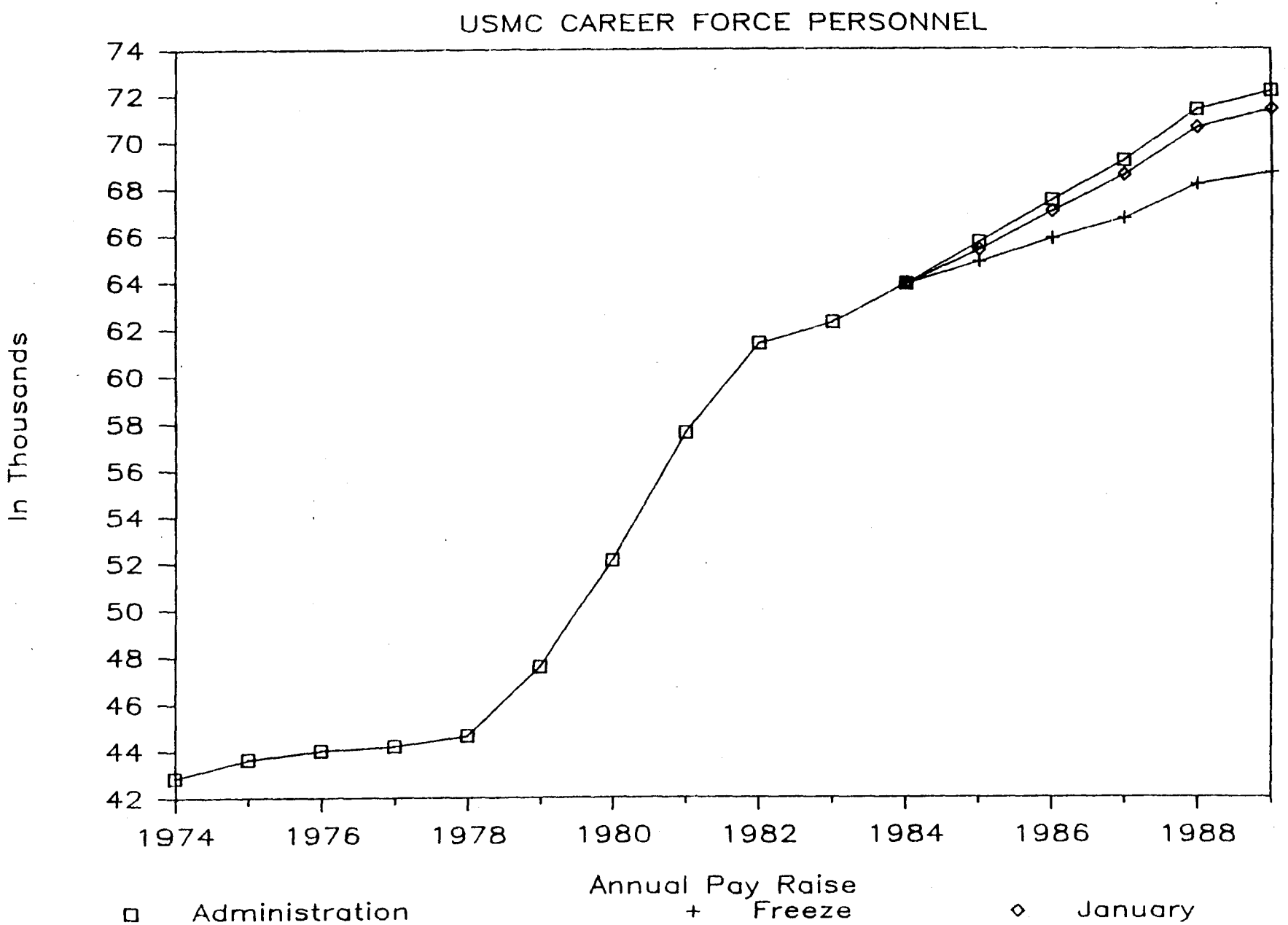
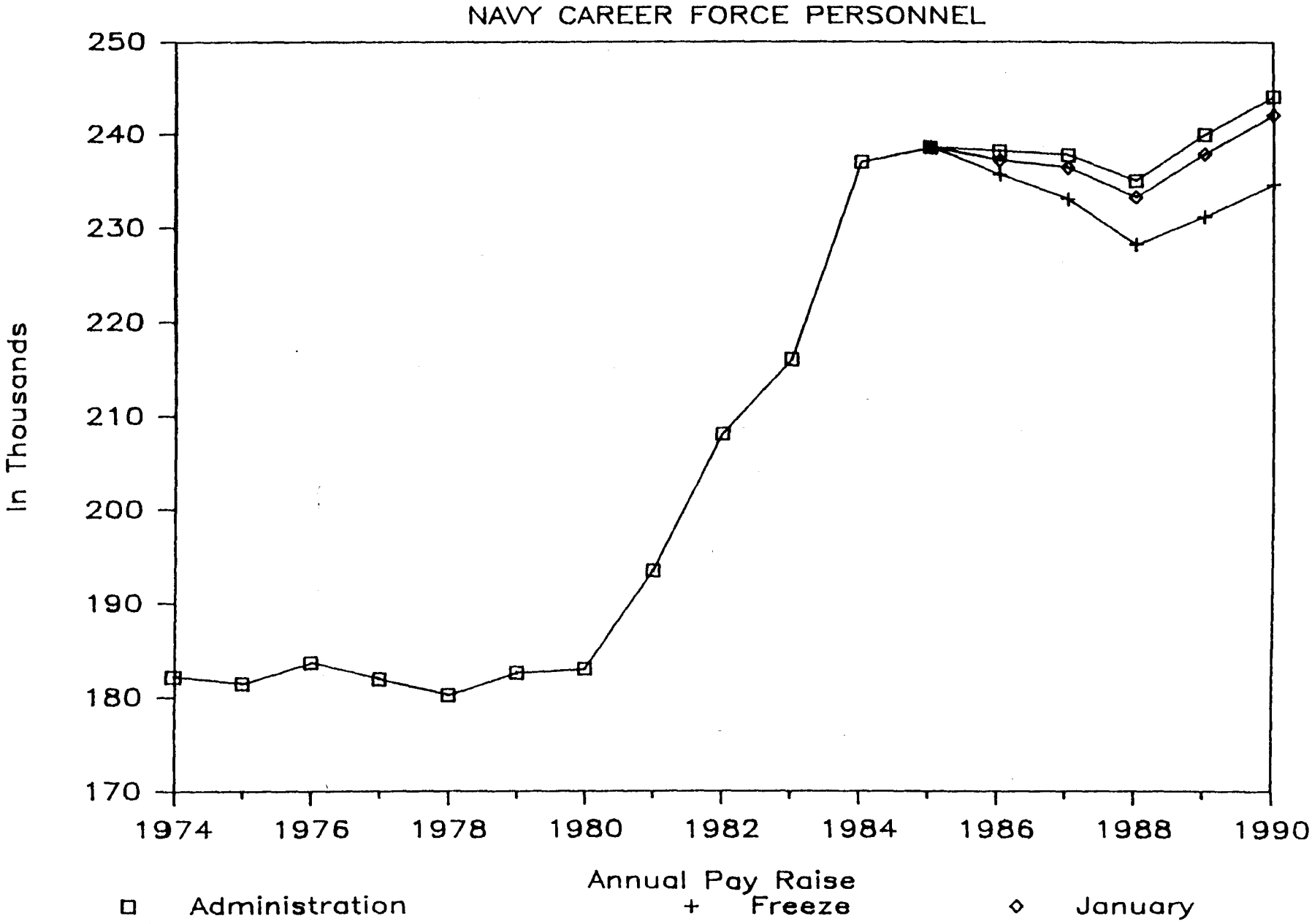


FIGURE 3. EFFECTS OF PAY RAISE OPTIONS



clearly in Figure 4, and lowering the proportion of career personnel roughly to the level of 1981. The Army could find it harder to absorb the various new weapons systems due soon to enter its inventory.

The Army's heavy use of educational benefits is one reason its career force would fare relatively poorly. Soldiers who are motivated to enlist by generous benefits will have an incentive to leave in order to use them. Alone among the services, the Army now offers qualified recruits "kickers" that raise total post-service benefits to as much as $24,600. The first recipients of educational kickers are now ending their initial terms of service. In the future, more and more potential reenlistees will have been the beneficiaries of educational benefits. And by 1989, the first recipients of the recently enacted "new GI Bill" will be eligible for reenlistment. CBO estimates that the incentive to use educational benefits will lower recipients' first-term reenlistment rate by around 7 percent.

Present reenlistment policies are another reason why the Army's career force would, at best, remain stable through 1990. Between 1983 and 1985, changing reenlistment standards were partly responsible for a decline in Army career personnel. CBO's projections are very sensitive to the future status of these standards. By changing reenlistment policies, the Army could offset the effects of a freeze and actually gain 4,400 career people.

JUDGING THE OUTLOOK FOR RETENTION

CBO's projections can be summarized as indicating that the more military pay in 1986 falls short of the Administration's proposal, the greater the loss of career personnel. But, by themselves, projected losses are not necessarily bad. They should be weighed against the costs of higher pays and benefits that go to experienced personnel. The question is: What is the optimal proportion of career personnel?

Service Standards

The services all plan on specific career-force inventories in the fiscal year 1986 budget. 2/ These translate into a 59.7 percent proportion of career

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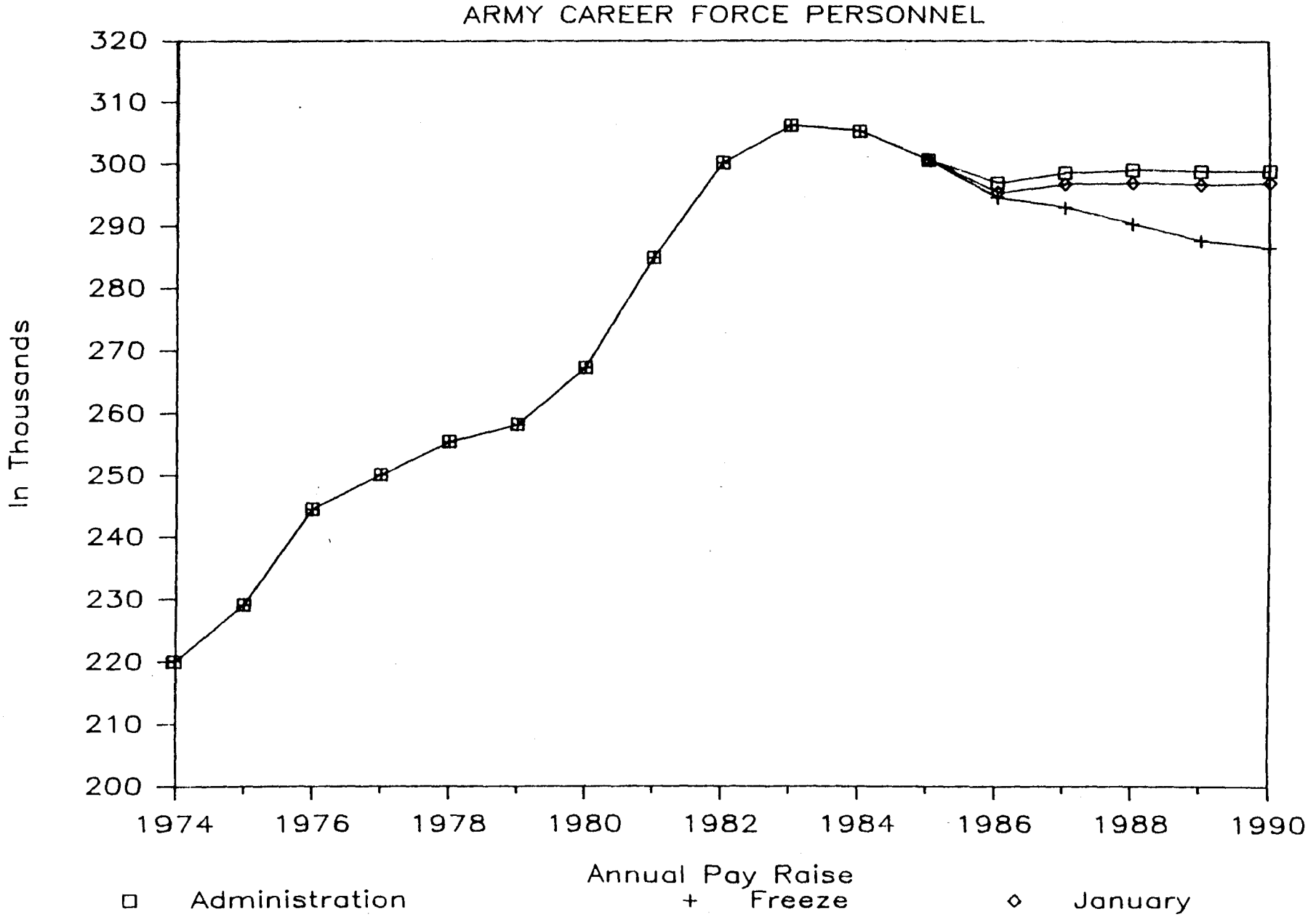
2. Programmed inventories of career personnel for fiscal year 1986 appear in Department of Defense, Manpower Requirements Report for Fiscal Year 1986, Volume III: Force Readiness Report (February 1985).

FIGURE 4. EFFECTS OF PAY RAISE OPTIONS



personnel in the Air Force; 50.5 percent in the Navy; 40.3 percent in the Marine Corps; and 45.1 percent in the Army. How the services arrive at these goals is not clear. They may be rigorously defined objectives based on what would be most cost effective, or they may simply reflect ongoing trends. Previously, when times were not as good, the services have desired smaller career forces. For example, in 1977 (when the first-term reenlistment rate in the Air Force was more than 20 percentage points lower than today's), the Air Force's personnel plan called for a 67/33 split between first-termers and career people. 3/ This does not mean that today's 60 percent Air Force career force program is too high, but it does suggest that present career force programs reflect feasibility rather than standards of optimality. 4/

Judging by Experience

With no "standard" for optimal career force size, historical analogy becomes one rough way to judge the alternative pay raises. The period 1979-1980 was a nadir for the All-Volunteer Force (AVF). Career personnel departed in large numbers, the quality of enlisted personnel plummeted, and manning shortfalls began to appear. If any service's career force were to decline to the levels of 1980, the Congress might conclude--as it did then--that military pay and benefits needed improving.

Overall, the Administration's proposal would keep the proportion of enlisted personnel well above the levels of 1980. So too would a freeze, though the career forces would undergo some erosion from present levels. Table 5 compares the career forces' proportions under a freeze with their past proportions and with those programmed and projected. Losses from a freeze should pose the Air Force and Marine Corps little risk, since their career forces will stay at or above historically robust levels. If end

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3. This split actually applied to a sample of occupations, covering 25 percent of Air Force skills, that was representative of all Air Force jobs.

4. Earlier research by the Rand Corporation into managing the Air Force cost-effectively supported a 50/50 split between first-termers and career personnel. Though the results are not definitive, they do underscore questions about continuing growth in the Air Force's career force. (See Robert Gay, Mark Albrecht; Specialty Training and the Performance of First-Term Enlisted Personnel; Rand Corporation, April 1979.)

TABLE 5. PROPORTIONS OF ENLISTED CAREER PERSONNEL: ACTUAL, PROGRAMMED, AND PROJECTED UNDER A PAY FREEZE (In percent)

	Actual			Programmed a/	Projected b/	
	Average 1974-1979	1980	1984	1986	1986	1990
Army	36.2	39.7	45.7	45.1	44.2	43.0
Navy	40.3	40.9	48.4	50.5	46.2	43.8
Marine Corps	25.6	27.9	35.4	40.3	36.2	37.4
Air Force	52.5	52.1	56.0	59.7	58.3	58.0

a. Inventories of career personnel programmed in the services' budget requests for fiscal year 1986.

b. CBO's projections assuming end-strength increases through 1990 as specified under the most recent manpower programs.

strengths grow at the rate the Navy seeks, its proportion of career personnel would start to head down, but not to earlier levels.

The Army's outlook is special because it depends on policy as much as on pay. CBO's projections extrapolate from reenlistment experience during 1984. But in 1985, the Army relaxed some of the restrictive policies towards reenlistment that it had started in 1983. This relaxation, particularly in concert with further changes in policy, could mitigate the effects of a pay freeze.

Army Reenlistment Policies--Trading Quality for Quantity

In 1983, the Army tightened its standards for reenlistment to weed out marginal performers--many of whom happened to score below average on the AFQT. A combination of poor recruiting conditions and mistakes on the military's entrance examination in 1979 and 1980 caused the Army to enlist thousands of low-scoring and poorly educated recruits in those years. Fearing that in the long run they would degrade performance, the Army acted to restrict the number of these soldiers who could enter the career

force. It adopted new regulations requiring that soldiers in their first or second terms be in line for promotion to pay grade E-5 in order to reenlist. While not tied explicity to AFQT score, this policy effectively forced out many E-4 personnel whose scores on the AFQT put them in Categories IIIB and IV. (Various other standards were also tightened.)

Loosening Reenlistments. In 1985, the Army relaxed its policy towards the first-term soldiers by letting all those in pay grade E-4 reenlist. This change could well improve the outlook for retention under a pay freeze. If the Army further relaxed its policies--by returning to the regulations in effect in 1982--CBO estimates that by 1990 it could actually have 4,400 more career personnel than today.

The gain in numbers would involve a trade-off in "quality." Under the Administration's pay raise proposal, career personnel would number 299,000 by 1990, of whom 50 percent would be in Categories I-IIIA. In comparison, a freeze would take away about 1,400 I-IIIA career personnel. But relaxed reenlistment policies would add back an additional 7,500 Category IIIB and IV personnel. The net gain of 6,100 would mean a larger, as well as more senior, career force, although 48.6 percent instead of 50 percent would be in Categories I-IIIA. 5/

Trading off higher- for lower-scoring personnel might not have a dramatic effect on quality. By loosening reenlistments, the Army would reduce the percent of I-IIIA career personnel by only about one and one-half percentage points by 1990. It would still have about four and one-half percentage points more in Categories I-IIIA than it has today.

More important, the relationship between entrance examination scores and later performance is not settled. Although the Army asserts that there is a link between scores and later performance, the Office of the Secretary of Defense takes the position that the AFQT is not a meaningful measure of quality in the career force. Indeed, some evidence suggests that performance improves with experience. If so, then gaining a larger career force might be a worthwhile trade.

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5. These figures use AFQT scores that were calibrated to the 1944 mobilization population. Recently, the Department of Defense adopted a new standard against which to interpret scores--the 1980 youth population. If recalibrated, CBO's estimated percentages would be smaller, but the relationships among the pay alternatives probably would not change.

Army personnel policies could thus prove more important to its career force than what happens to pay in 1986. The Army could modify its reenlistment policies to offset the effects of a freeze, though it might not wish to do so.

RAISING PAY SELECTIVELY

Across-the-board approaches to raising pay have disadvantages. Their effects are diffuse: everybody in the service, including junior and senior enlisted personnel and officers, receives the same treatment. To support their career forces, the services really need only to direct pay increases to the first and second reenlistment points, which roughly correspond to years of service 4 through 10. (After the 10th year of service, reenlistment rates rise markedly because of the pull of retirement at 20 years. Moderate pay changes would affect those high rates only marginally.) Across-the-board approaches also treat all the services alike, though their circumstances differ widely.

Selectively raising pay could effectively meet military needs at less cost. If pay were frozen, the services could use selective reenlistment bonuses (SRBs) to keep up first- and second-term reenlistments. The services now pay bonuses of up to $30,000 (though averaging less) to service members with critically needed skills who reenlist for at least three years. To get roughly the same effect on first- and second-term reenlistments as raising pay 3 percent across the board in July, spending on bonuses would have to increase about $2.8 billion over the next five years, as shown in Table 6, with the largest increases in the Army and Navy. Against the Administration's budget, five-year savings would total $7.1 billion. 6/

Five-year savings would be higher if the Congress gave additional bonus money only to the services in greatest need. One possibility would be to direct extra money to the Navy. The Air Force and Marine Corps may not need additional career personnel because of the projected momentum in the growth of their career forces, and the Army may be able to increase its career forces through changes in recruitment policy. If bonuses were limited to the Navy, spending would have to increase less than $900 million over the next five years.

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6. If bonuses were raised high enough to induce the desired increase in reenlistments, then reenlistees now getting bonuses could also be paid more. Thus a portion of the $2.8 billion would be an "economic rent"--a return to enlisted personnel in excess of the amount required to boost their reenlistments.

TABLE 6. COSTS OF SELECTIVELY RAISING PAY IN LIEU OF AN ACROSS-THE-BOARD RAISE IN 1986, FISCAL YEARS 1986-1990 (In millions of current dollars)

Service	1986	1987	1988	1989	1990	Cumulative
Army	120	140	180	225	290	955
Navy	100	115	150	195	320	880
Marine Corps	30	35	55	65	105	290
Air Force	75	80	110	135	225	625
DoD	325	370	495	620	940	2,750

NOTE: Costs would be in the Selective Reenlistment bonus program. One-half the bonus would be paid in a lump sum, the rest spread equally over the new term.

CHAPTER III. THE OUTLOOK FOR RECRUITMENT

Over the past few years, recruiting in all services has met with resounding success. In 1980, 31 percent of all accessions without previous military service (non-prior service, or NPS) scored in the lowest acceptable category of the AFQT, known as Category IV. Only 65 percent of the men held high school diplomas--a key measure of recruiting success because high school graduates are more likely than nongraduates to complete training, and then possibly perform better. The picture was bleakest for the Army; 50 percent of its recruits were in Category IV, and 51 percent were drop-outs from high school.

After 1980, a combination of pay and benefit changes, high civilian unemployment, and much improved recruiter productivity led to marked improvement. By 1984, only 7 percent of NPS accessions were in Category IV and 93 percent of the men were high school diploma graduates (HSDGs). All the services, including the Army, shared in this success.

OVERVIEW OF FUTURE RECRUITING

Over the coming decade--as unemployment continues dropping and youth cohorts shrink--the supply of high-quality recruits is projected to trend down less than 10 percent. This, rather than next year's pay raise, will determine recruiting success. Whether a modest pay increase occurs in July, January, or not at all will have little effect on willingness to enlist.

Next year's pay could, however, affect recruiting indirectly through changes in service demand. By hastening losses from the career force, a pay freeze would pressure the services to recruit more and more young men. Thus the percentage of HSDG accessions would fall, though the greatest effects would not be felt until after 1987. Declines would be slight in the Air Force and Marine Corps because of their strong career forces. Their HSDG percentages could generally stay above 90 percent. But the Army and Navy could dip into or below the low 70s by decade's end, because of career force losses. Table 7 shows projected HSDG percentages under the various pay alternatives.

TABLE 7. PROJECTED PERCENTAGES OF HIGH SCHOOL DIPLOMA GRADUATE MALE ACCESSIONS UNDER PAY RAISE ALTERNATIVES

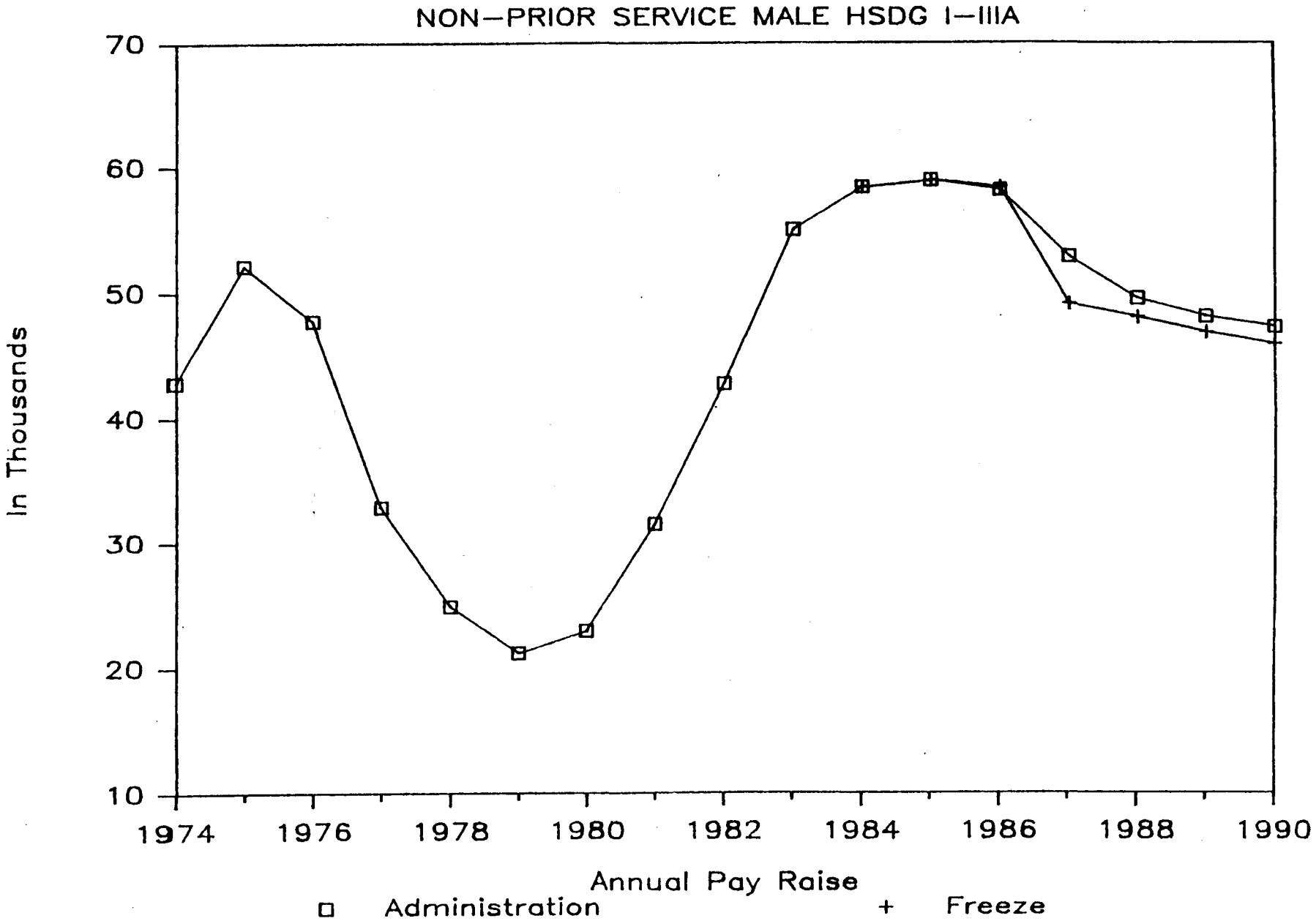
	1986	1987	1988	1989	1990
Administration Proposal					
Army	89	85	76	74	72
Navy	79	78	78	77	71
Marine Corps	99	99	93	97	99
Air Force	96	97	97	98	98
Deferred Raise					
Army	89	81	75	73	71
Navy	79	78	78	75	70
Marine Corps	99	99	92	96	97
Air Force	96	97	97	98	98
No Pay Raise					
Army	87	74	71	68	67
Navy	78	78	78	68	68
Marine Corps	99	95	89	92	93
Air Force	95	96	97	97	97

NOTE: These figures assume the services' own requirements for recruits in AFQT Category IV--10 percent in the Army, 12 percent in the Navy, 5 percent in the Air Force, and 14 percent in the Marine Corps. In recent years, the Marine Corps has actually enlisted fewer Category IV recruits (that is, 6 percent in 1983). If the Marine Corps kept these smaller percentages, its HSDG content would drop by at least 8 percent.

RECRUITING IN THE ARMY

Regardless of the 1986 pay raise, Army accessions of high-quality recruits are likely to decline from recent years' peaks. CBO projects a drop of between 20 and 22 percent. Still, the Army would be enlisting at least 23,000 more HSDGs in Categories I-IIIA in 1990 than it did in 1980, thanks in large part to better management of the recruiter force Indeed, the 46,000 to 47,000 or so high-quality accessions would compare well with recruiting in any year during the AVF, as Figure 5 shows.

FIGURE 5. ARMY HIGH-QUALITY ACCESSIONS



HSDG Percentages

Differences between raising and freezing pay show up in the percentage of NPS male accessions with high school diplomas. If the Congress raised pay 3 percent (either in July or January), CBO projects that the HSDG percentage would drift down to the low 70s--similar to the percentage of high school graduates in the youth population, but well below recent years' attainments. A pay freeze could eventually push the percentage below 70 percent, dangerously near the 65 percent minimum allowed by the Congress.

Army Recruiting: Not Just a Pay Issue

With HSDG percentages falling under any of the three alternatives, it is important to separate the outlook for recruiting from the debate over next year's pay raise. If DoD and the Congress are not satisfied with HSDG percentages in the low 70s, then the Army will need extra resources to reverse the downward trend.

A large part of the projected decline in HSDG content stems from managerial decisions. As with retention, the Army could easily alter the outlook by changing personnel policies. Boosting the proportion of recruits in Category IV would be one way to improve the HSDG percentage. CBO's projections assume that that proportion would stop at 10 percent, but since 1974, the percentage of recruits in Category IV has only once gone that low (in 1975). Relaxing CBO's assumed limit would boost the Army's HSDG percentage several points. By holding Category IV recruits to 14 percent of accessions--the same as the Marine Corps' goal and still low by historical standards--the Army could keep its HSDG male percentage in the low- to mid-70s even if pay was frozen.

Loosening reenlistment policies, as discussed earlier, also could help recruiting. With a reduced demand for recruits, a pay freeze could have effects similar to those of the Administration's proposal. And if the Army relaxed its limits on Category IV while loosening reenlistment, the percentage of males with high school diplomas could climb into the high 70s.

RECRUITING IN THE NAVY

A pay increase in 1986 would cause the Navy's percentage of male HSDG accessions to return near the historical norm. Throughout the 1970s, the Navy held its HSDG percentage steady in the low 70s; it did this by taking in more Category IV recruits as conditions warranted.

If pay was frozen, the Navy could have difficulty keeping up its HSDG percentages, especially towards decade's end. If it decided, as it did in the mid-1970s, to take in more Category IV recruits, the HSDG percentages would rise. And if the Congress limited the Navy to smaller increases in end strengths than it now seeks, the outlook for recruiting would improve still more.